

# ABSTRACT

A sensor system for a disk device by using a floating head, comprising a head element that floats over a data recording area of a rotating disk so as to write data thereon or read data therefrom, a first actuator for moving the head element over the data recording area of the disk, and a second actuator supported by the first actuator and supporting the head element for precisely positioning the head element against the data recording area of the disk. The sensor system is capable of detecting any contact between the disk and the head element by utilizing a signal generated by the second actuator when the disk contacts the head element during an operation of the disk.